

EUROPEAN PATENT OFFICE

Patent Abstracts of Japan

PUBLICATION NUMBER : 07213926
PUBLICATION DATE : 15-08-95

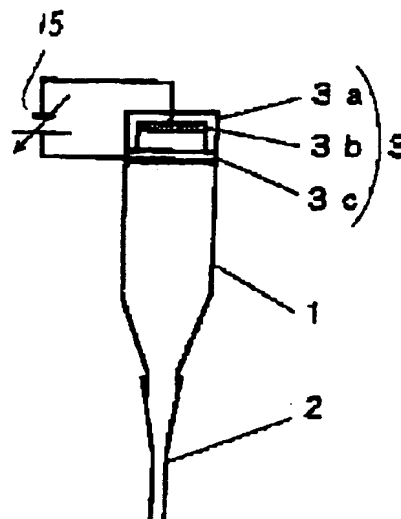
APPLICATION DATE : 03-02-94
APPLICATION NUMBER : 06011691

APPLICANT : HITACHI KOKI CO LTD;

INVENTOR : TAMAHASHI KUNIHIRO;

INT.CL. : B01L 3/02 G01N 1/00

TITLE : PIPETTE



ABSTRACT : PURPOSE: To provide a pipette by which a very small amt. of liq. can be highly accurately treated and which is small-sized and causes no increase in cost.

CONSTITUTION: When an electric voltage is applied between an electrode 3b fixed on the glass base sheet 3a of an electrostatic actuator 3 and an electrically-conductive thin sheet 3c by means of the electrostatic actuator 3 provided on a pipette 1, strain is generated on the electrically-conductive thin sheet 3c by electrostatic force. The amt. of strain generated in the electrically-conductive thin sheet 3c is set to be variable by making the applied electric voltage generating the electrostatic force variable and the amt. of suction and injection of a very small amt. of liq. is controlled by this change in the amt. of strain.

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XP-002124060

AN - 1995-316145 [41]

AP - JP19940011691 19940203

CPY - HITO

DC - J04 S03 V06

FS - CPI;EPI

IC - B01L3/02 ; G01N1/00

MC - J04-B

- S03-E13B1 V06-M06F

PA - (HITO) HITACHI KOKI KK

PN - JP7213926 A 19950815 DW199541 B01L3/02 005pp

PR - JP19940011691 19940203

XA - C1995-140203

XIC - B01L-003/02 ; G01N-001/00

XP - N1995-238904

AB - J07213926 Electrostatic actuator for making capacity of a pipette vessel by generating deflection of a conductive thin plate is attached to the pipette vessel. The electrostatic actuator (3) comprises a glass plate (3a), an electrode (3b) fixed to the glass plate (3a), and a conductive silicon thin plate (3c) facing the electrode (3b). Deflection is generated in the conductive silicon thin plate (3c) by electrostatic force when DC voltage applied across the electrode (3b) and the conductive silicon thin plate (3c). Amount of deflection of the conductive silicon thin plate (3c) is controlled by controlling the DC voltage.

- USE - The pipette is used to suck and discharge very small amount of liquid accurately.

- (Dwg. 1/4)

IW - PIPETTE SUCK DISCHARGE AMOUNT LIQUID COMPRISE ELECTROSTATIC ACTUATE ATTACH PIPETTE VESSEL

IKW - PIPETTE SUCK DISCHARGE AMOUNT LIQUID COMPRISE ELECTROSTATIC ACTUATE ATTACH PIPETTE VESSEL

NC - 001

OPD - 1994-02-03

ORD - 1995-08-15

PAW - (HITO) HITACHI KOKI KK

TI - Pipette used to suck and discharge small amount of liquid - comprises electrostatic actuator attached to pipette vessel